maintaining the data needed, and c including suggestions for reducing	lection of information is estimated to ompleting and reviewing the collect this burden, to Washington Headqu uld be aware that notwithstanding ar DMB control number.	ion of information. Send comments arters Services, Directorate for Info	s regarding this burden estimate ormation Operations and Reports	or any other aspect of the s, 1215 Jefferson Davis	nis collection of information, Highway, Suite 1204, Arlington	
. REPORT DATE 2004 2. REPORT TYPE			3. DATES COVERED 00-00-2004 to 00-00-2004			
4. TITLE AND SUBTITLE Integrated Missile Defense Changing the Way We Think and Fight				5a. CONTRACT NUMBER		
				5b. GRANT NUMBER		
				5c. PROGRAM ELEMENT NUMBER		
6. AUTHOR(S)				5d. PROJECT NUMBER		
				5e. TASK NUMBER		
				5f. WORK UNIT NUMBER		
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Army Space & Missile Defense Command, Army Forces Strategic Command, Redstone Arsenal, AL, 35809				8. PERFORMING ORGANIZATION REPORT NUMBER		
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)		
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)		
12. DISTRIBUTION/AVAIL Approved for publ	ABILITY STATEMENT ic release; distributi	on unlimited				
13. SUPPLEMENTARY NO	OTES					
14. ABSTRACT						
15. SUBJECT TERMS						
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON	
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified	Same as Report (SAR)	3		

Report Documentation Page

Form Approved OMB No. 0704-0188

Integrated Missile Defense Changing the Way We Think and Fight

By Heather J.S. Macias

Integrated Missile Defense

SMDC/ARSTRAT plans for, integrates, and coordinates Army missile defense forces. It provides theater early warning and assessment of missile attack with organic capabilities, and recommends coordinated offensive and defensive options and rules of engagement. It coordinates Army requirements and operates the ground-based midcourse missile defense system. Additionally, SMDC/ARSTRAT may deploy joint tactical ground stations with theater high-altitude air defense (THAAD) and Patriot assets.

n the past, ballistic missile defense focused on efforts to counter a theater threat. Each theater and region deployed organic missile defense capabilities to defeat and deter that threat. Now, expanding enemy capabilities range from an increased array of short-range missiles to intercontinental ballistic missiles. SCUD missiles can be fired from offshore platforms against the United States. Available sensors and defense systems are inter-service and multitasked. This evolving threat requires a shift in focus from a theater perspective to a global perspective — the mission now demands integrating missile defenses across and between theaters, including the United States.

Effective integration requires the synchronization of all the operational elements of missile defense (attack operations, passive defense, active defense, and battle management, command, control, and communications) to deter and defeat the enemy threat. As joint friendly capabilities develop, these systems must be integrated into global plans to optimize their contributions to missile defense — while continuing to meet strategic objectives.

Even a cursory review of this notional scenario illustrates that global ballistic missile defense is no longer theater-centric. Effective prosecution of a global ballistic missile defense strategy requires the integration of theater, regional and homeland objectives to optimize limited resources and meet strategic priorities.

A New Perspective

Synchronization of ballistic missile defense from a global perspective requires tools to provide real time access to common, current situation information and support products for distributed coordination of plans and the synchronization of actions across multiple head-quarters. A joint structure that collaborates with the geographic combatant commands throughout deliberate and crisis action planning is essential to synchronize requirements and resources. Finally, a process to effectively synchronize the requirements and resources (active defense, ISR resources and attack operations) across and between regions to optimize offensive and defensive operations in accordance with strategic priorities must be institutionalized

Framework Concept

Since U.S. Strategic Command has the responsibility and acts as the coordinating authority for planning, integration and coordination of global ballistic missile defense, the Standing Joint Forces Headquarters proposes a structure and process to enhance those responsibilities. The framework is modeled on Joint Forces Command's concept for the Standing Joint Force Headquarters, or SJFHQ, and provides a full-time, trained and equipped, joint staff directorate to integrate the cross functional operational elements of integrated missile defense, or IMD.



Global missile defense synchronization requires a joint structure focused on offensive-defensive integration, requirements for pervasive ISR, and collaborative planning with the regional combatant commanders. In support of the regional combatant commander, SJFHQ-IMD provides the strategic level integration of friendly capabilities to counter the global threat, thus allowing the theater to focus on the prosecution of the tactical and operational fight. SJFHQ-IMD does not replace the regional Army Air and Missile Defense Commands; rather, it provides the strategic structure to optimize inter-theater capabilities in support of the missile fight.

The Joint Forces Headquarters is designed to maximize the benefits of the collaborative information environment to synchronize the operational plans of the regional combatant commanders at the strategic level. It provides a missile defense-focused structure providing mission-area expertise in support of U.S. Strategic Command's Global Operations and Integration Centers. This organization represents Strategic Command's missile defense priorities to global joint targeting boards, recommends priorities to the global defended asset list and integrates global strike and ISR capabilities to maximize strategic and operational effects.

Structure and Process

Leveraging successes from the Army Air and Missile Defense Command theater missile fight and the existing Joint Forces Command concept for the SJFHQ, the proposed structure optimizes planning for missile defense through the organization of its staff and the integration of its capabilities into the operations of U.S. Strategic Command.

Under the direction of a flag officer (the SJFHQ director), the organization is staffed with joint, missionarea experts who are organized into four cross-functional teams to accomplish daily mission requirements. These teams operate within the knowledge-based environment to maximize integration and synchronization between the teams, the regional combatant commands and other external military and civilian agencies.

Team Functions and Tasks

Planning Team: The planning team is the primary interface between the regional combatant commands and the Strategic Command Global Operations Center. It is tasked organized with joint members demonstrating expertise in the various operational elements of missile defense. This team, in conjunction with regional combatant command planners, develops and integrates global missile defense plans to achieve maximum protection in accordance with strategic priorities.

Operations Teams: The operations team monitors ongoing operations through the collaborative information environment to provide situational awareness, monitors friendly force readiness and assesses achieved effects against desired effects.

(See IMD for the 21st Century, page 53)

IMD for the 21st Century ... from Page 21

Information Superiority Teams: The information superiority team is tasked with coordinating requirements and synchronizing activities for the operational net assessment, joint ISR and effects assessment. This team is responsible for the baseline operational net assessment and fusing information from various organizations into the updates.

Knowledge Management Teams: The knowledge management team is responsible for managing the knowledge and information management requirements for the SJFHQ. It provides communication and computer technical support and implements processes to meet essential information needs. Ensuring the effective functioning of the collaborative information

environment platform is essential to SJFHQ operations and planning.

Transformational Change

The SJFHQ-IMD concept is about transformational thinking in how we approach and execute the challenge of global integrated missile defense. This innovative structure optimizes the planning, coordination and integration efforts of the regional combatant commands with U.S. Strategic Command's mission for integrated missile defense and SMDC/ARSTRAT's mission as the Army service component command to plan, coordinate and integrate Army missile defense forces. SJFHQ-IMD enhances the joint integration of missile defense and provides a transformational solution to achieve mission success — now and in the future.

Heather Macias serves as the Senior Systems Analyst supporting ARSTRAT working tactical, operational and strategic integrated missile defense. She is a retired lieutenant colonel after 20 years of service; 12 years as an Air Defense Officer, five in the Acquisition Corps, and three as a Space Operations Officer. She was the High to Medium Air Defense Branch Chief at the Air Defense Artillery School and Air Defense Center, Fort Bliss, Texas. She developed PATRIOT weight sets as a Software Analyst for HIMAD systems, Directorate of Combat Developments at the Air Defense Center, Fort Bliss. She designed and taught the Army's only graduate level Space Operations course to certify Army officers as Space qualified (3Y).